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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,100	12/28/2001	Srinivas S. Pitla	10541-628	8418

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EXAMINER

LOPEZ, FRANK D

ART UNIT PAPER NUMBER

3745

DATE MAILED: 10/01/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/034,100

Applicant(s)

PITLA ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 28, 2003 has been entered.

***Response to Amendment***

Applicant's arguments filed July 31, 2003, have been fully considered but they are not deemed to be persuasive.

Applicant argues that Terauchi (5,615,599) does not show a skirt fully slidably engaged with the groove. Applicant is mistaken. For example, fig 13 and 14 show an arcuate outer surface (884b) fully slidably engaged with a complementary groove (612b).

Applicant argues that Rasmussen does not show a skirt fully slidably engaged with the groove. Applicant is mistaken. For example, fig 1 and show an arcuate outer surface (of 13) fully slidably engaged with a complementary groove (22).

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

Claims 10, 20 and 28 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, 20 and 28 "the skirt includes a planer outer surface integrally connected to the arcuate outer surface" is wrong, in combination with the limitation "the skirt is fully slidably engaged with the groove" (e.g. claim 1 line 9). The only disclosure of a planer outer surface is figures 8-12b, which shows the skirt not fully slidably engaged with the groove, because there is a gap between the planer outer surface (174) and the groove (130, see also page 7 line 12).

***Double Patenting***

Applicant is advised that should claims 3-5 be found allowable, claims 21-23, respectively, will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 102***

Claims 1 and 6-10 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Rasmussen (see fig 2).

Claims 1, 8 and 9 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Terauchi (5,615,599; see fig 13).

***Claim Rejections - 35 USC § 103***

Claims 2-5, 11-16 and 18-28 are rejected under 35 U.S.C. § 103 as being unpatentable over Rasmussen. Rasmussen discloses a piston anti-rotation mechanism for a swash plate compressor comprising a housing having an inner wall and a front end connected to an inner wall defining a crank case; a plurality of piston receiving bores (1) formed in the front end adjacent one of a plurality of anti-rotation grooves (22) formed in the inner wall; an anti-rotation piston having a skirt (13) extending from a bottom end of a body (3, 4), wherein the body has a first radius of curvature (for piston 3) and slidably movable in the bore; wherein the skirt has a planer outer surface (see e.g. fig 1) integrally connected to an arcuate outer surface with a second radius of curvature fully slidably engaged in the anti-rotation groove; wherein the axis (19) of rotation of the skirt is within the piston, between the inner wall and the axis (1a) of rotation of the piston, and offset from the axis of rotation of the piston, to prevent rotation of the piston; wherein a swash plate (6) is angularly disposed about a first portion of a drive shaft (7), located in the crank case; wherein the skirt forms a plate receiving slot through which the swash plate angularly rotates to slidably move the piston along the bore; with the

slot has first and second shoe pockets respectively formed in first and second walls; with a shoe (11, 12) in each pocket; but does not disclose that the second radius is greater than the first radius; or that the front end has a drive shaft side, through which the drive shaft extends.

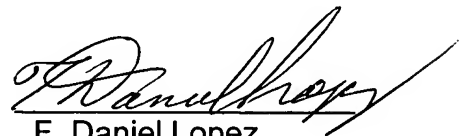
Since it is not inventive to discover optimum or workable ranges by routine experimentation, unless the range is a critical range (i.e. the critical range produces an unexpected result, which is different in kind and not just in degree), and since making the second radius larger than the first radius is a workable range of values for the radius; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the second radius of Rasmussen larger than the first radius, as a matter of engineering expediency. Note that the applicant has the burden to prove that this value for the radius is a critical value.

Official notice is taken that a front end of a housing has a drive shaft side, through which a drive shaft extends, for the purpose of closing off the housing. It would have been obvious at the time the invention was made to one having ordinary skill in the art to make the front end of the housing of Rasmussen with a drive shaft side, through which a drive shaft extends, for the purpose of closing off the housing.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.

  
F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
September 27, 2003